



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Travis Wakefield
Diesel Dr Diagnostics
dieseldrdiagnostics@gmail.com

Re: Finding of Violation
Diesel Dr Diagnostics
Effingham, Illinois

Dear Mr. Wakefield:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Diesel Dr Diagnostics, Inc. (Diesel Dr or you) for violating Sections 203(a)(3)(A) and (B) of the Clean Air Act (CAA), 42 U.S.C. §§ 7522(A)(3)(A) and (B). As summarized in the attached FOV, EPA has determined that Diesel Dr has removed and/or rendered inoperative devices or elements of design installed on or in motor vehicles or motor vehicle engines, and has sold, offered to sell, and installed parts or components that bypass, defeat, or render inoperative elements of design of those engines that were installed by the original equipment manufacturer in order to comply with CAA emissions standards.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Ethan Chatfield. You may call him at (312) 886-5112 or email him at chatfield.ethan@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Constantinos Loukeris
Acting Chief, Air Enforcement and Compliance Assurance Section (IL/IN)

Enclosure: SBREFA fact sheet

cc: Francis X. Lyons
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Kent Mohr, Manager
Compliance Section
Bureau of Air
Illinois Environmental Protection Agency
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1. Title II of the CAA was enacted to reduce air pollution from mobile sources. In enacting the CAA, Congress found, in part, that “the increasing use of motor vehicles . . . has resulted in mounting dangers to the public health and welfare.” Section 101(a)(2) of the CAA, 42 U.S.C. § 7401(a)(2). Congress’s purpose in enacting the CAA included “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population,” and “to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution.” Section 101(b)(1)–(2) of the CAA, 42 U.S.C. § 7401(b)(1)–(2).
2. Section 216(2) of the CAA, 42 U.S.C. § 7550(2) defines “motor vehicle” as “any self-propelled vehicle designed for transporting persons or property on a street or highway.” *See also* 40 C.F.R. § 85.1703 (further defining “motor vehicle”).
3. Pursuant to Section 202 of the CAA, 42 U.S.C. § 7521, EPA promulgated emission standards for particulate matter (PM), nitrogen oxides (NO_x), and other pollutants applicable to motor vehicles and motor vehicle engines, including diesel engine vehicles. *See* the implementing regulations at 40 C.F.R. Part 86. These diesel engine emission standards must “reflect the greatest degree of emission reduction achievable through the application of [available] technology.” Section 202(a)(3)(A)(i) of the CAA, 42 U.S.C. § 7521(a)(3)(A)(i).
4. Section 203(a)(1) of the CAA, 42 U.S.C. § 7522(a)(1), prohibits a manufacturer of motor vehicles or motor vehicle engines from selling a new motor vehicle or motor vehicle engine in the United States unless the motor vehicle or motor vehicle engine is covered by a certificate of conformity (COC). EPA issues COCs to motor vehicle and motor vehicle engine manufacturers under Section 206(a) of the CAA, 42 U.S.C. § 7525(a), to certify that a particular group of motor vehicles and motor vehicle engines conform to applicable EPA requirements governing motor vehicle emissions. Each COC includes, among other things, a description of the diesel engine, its

emission control systems, all auxiliary emission control devices and the engine parameters monitored.

5. Diesel engine manufacturers employ many devices and “elements of design” to meet emission standards. “Element of design” means “any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine.” *See* 40 C.F.R. §§ 86.094-2 and 86.1803-01.
6. To meet the emission standards in 40 C.F.R. Part 86 and qualify for a COC, diesel engine manufacturers may utilize control devices or elements of design such as Exhaust Gas Recirculation (EGR), Clean Gas Induction (CGI), Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF), and/or Selective Catalytic Reduction (SCR) systems.
7. Diesel engine vehicle manufacturers may also employ engine fueling strategies, such as retarded fuel injection timing, as a primary element of design to limit emissions of NO_x. *See* 59 Fed. Reg. 23,264 at 23,418 (May 5, 1994) (“[I]njection timing has a very significant impact on NO_x emission rates, with advanced timing settings being associated with higher NO_x ...”).
8. Modern diesel engine vehicles are equipped with electronic control modules (ECMs). ECMs continuously monitor engine and other operating parameters and control the emission control devices and elements of design, such as the EGR, CGI, DOC, DPF, and SCR systems and the engine fueling strategy.
9. Under Section 202(m) of the CAA, 42 U.S.C. § 7521(m), EPA promulgated regulations for motor vehicles manufactured after 2007 that require diesel engine motor vehicles to have numerous devices or elements of design that, working together, can detect problems with the vehicle’s emission-related systems, alert drivers to these problems, and store electronically-generated malfunction information. 40 C.F.R. §§ 86.005-17, 86.007-17, 86.1806-05. These devices or elements of design are referred to as “onboard diagnostic systems” or “OBD” systems.
10. Section 203(a)(3)(A) of the CAA prohibits “any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under [Title II of the CAA] prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.”
11. Section 203(a)(3)(B) of the CAA prohibits “any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under [Title II of the CAA], and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.”

Background

12. Diesel Dr owns and operates an automotive diagnostics, repair, and tuning business located in Illinois and North Carolina that repairs heavy-duty vehicles and engines.
13. Diesel Dr is a “person,” as defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e).
14. On June 10, 2020, EPA sent a request for information (Information Request) to Diesel Dr in accordance with Section 208 of the CAA, 42 U.S.C. § 7542, requesting, among other things, information related to Diesel Dr’s sale, offer for sale and/or installation of parts, components, and services (products) which bypass, defeat, or render inoperative any emission control component, element of design, or emissions related part or component.
15. On August 21, 2020, EPA received Diesel Dr’s response to EPA’s Information Request (Response). The Response included invoices for products sold and/or installed by Diesel Dr on customer motor vehicles/engines. Work descriptions on the invoices in the Response did not however, provide sufficient information for EPA to determine the full scope of the work Diesel Dr had performed.
16. The Response provided by Diesel Dr states that from January 1, 2017 to June 11, 2020, it utilized two primary products to modify the ECM on motor vehicle and/or motor vehicle engines. Diesel Dr used: 1) an Alientech device to upload and download the vehicle/engine data necessary to perform tunes, and 2) WinOLS software to modify ECM files/parameters and perform the tune. Diesel Dr also stated that it used a third-party service known as “MyChiptuningfiles” to “assist in the tuning of its race tunes.”
17. The ECM modifications performed by Diesel Dr on motor vehicles and/or motor vehicle engines ranged from changing the fuel injection parameters to disabling emission control systems (e.g., EGR, CGI, DOC, DPF, and/or SCR system(s)) without illuminating a malfunction indicator lamp in the vehicle’s OBD system, prompting any diagnostic trouble code in the OBD system, or causing any engine derating due to the removal or disabling of an emission control device.
18. On October 21, 2020, EPA submitted a supplemental request for information (Supplemental Request) to Diesel Dr in accordance with Section 208 of the CAA, 42 U.S.C. § 7542, to clarify the provided work descriptions.
19. On December 8, 2020, Diesel Dr requested an extension to complete the response to the Supplemental Request and confirmed that it is no longer “selling tunes/devices that defeat or alter vehicle emission controls.”
20. On January 8, 2021, EPA received Diesel Dr’s response to EPA’s Supplemental Request (Supplemental Response). The Supplemental Response included a copy of the invoices with hand-written, annotated, general descriptions of the type of work performed. Diesel Dr also completed an Excel Spreadsheet denoting the actual work performed for each invoice description.
21. The Response and Supplemental Response submitted by Diesel Dr indicate that between January 1, 2017 and June 11, 2020, Diesel Dr sold and installed over 3,000 parts or components that bypassed, defeated, or rendered inoperative emission control components and/or elements of

design (defeat devices). Diesel Dr bypassed, defeated, and/or rendered inoperative the emission controls or elements of design on at least 2,724 vehicles/engines during this time period, including the disabling of the EGR on at least 666 vehicles/engines, the DPF on at least 304 vehicles/engines, and the SCR and/or Catalyst/Urea systems on at least 17 vehicles/engines.

22. The parts and/or components manufactured, sold, offered for sale, and/or installed by Diesel Dr were intended for “motor vehicles” as defined by Section 216(2) of the CAA, 42 U.S.C. § 7550(2). Specifically, Diesel Dr’s parts and/or components are designed for use on makes and models of diesel-engine motor vehicles for which their respective manufacturers have obtained COCs establishing the compliance with CAA emissions standards in unaltered condition. Further, Diesel Dr knew or should have known that these parts and/or components were being used to bypass, defeat, or render inoperative the emissions controls on motor vehicles and/or motor vehicle engines certified under the CAA.
23. The CAA does not exempt “off-road use only” or “competition only” vehicles or vehicle engines. The definition for motor vehicle at Section 216(2) of the CAA; 42 U.S.C. § 7550(2) and 40 C.F.R. § 85.1703 make no exemption for motor vehicles or motor vehicle engines used for competition. More generally, “off-road use only” or “competition only” vehicles are based on vehicle attributes (*e.g.*, inability to travel over 25 miles per hour, lack of features that render street use unsafe) and make no exemption for vehicles based on their purportedly intended use.

Violations

24. EPA finds that Diesel Dr knowingly removed and/or rendered inoperative the EGR, CGI, DPF, SCR, catalyst, and/or OBD systems and tampered with the emissions-related elements of the ECM installed on or in motor vehicles or motor vehicle engines, in violation of Section 203(a)(3)(A) of the CAA, 42 U.S.C. § 7522(a)(3)(A).
25. EPA finds that Diesel Dr manufactured, sold, offered to sell, and/or installed parts or components, intended for use with, or as part of, a motor vehicle or motor vehicle engine, where a principal effect of the part or component was to bypass, defeat or render inoperative elements of design that control emissions, such as the EGR, CGI, DPF, SCR, catalyst, OBD systems and/or other elements of design on motor vehicles and motor vehicle engines, and Diesel Dr knew or should have known that such part or component was being offered for sale or installed for such use or put to such use, in violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).

Environmental Impact of Violations

26. These violations may result in excess emissions of particulate matter (PM), NO_x, hydrocarbons, and other air pollutants and contribute to increased ground level ozone concentrations. PM, especially fine particulates containing microscopic solids or liquid droplets, can get deep into the lungs and cause serious health problems, including, but not limited to, decreased lung function; chronic bronchitis; irregular heartbeat; aggravated asthma; and premature death in people with heart or lung disease. Furthermore, current scientific evidence links short-term NO_x exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-

level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

Enforcement Authority

27. EPA may bring an enforcement action for these violations under its administrative authority or by referring this matter to the United States Department of Justice with a recommendation that a civil complaint be filed in federal district court. *See* Sections 204 and 205 of the CAA, 42 U.S.C. §§ 7523 and 7524. Any person who violates Section 203(a)(3) of CAA, 42 U.S.C. § 7522(a)(3), is subject to an injunction under Section 204 of CAA, 42 U.S.C. § 7523, and a civil penalty of up to \$4,876 for each violation. Section 205(a) of the CAA, 42 U.S.C. § 7524(a); 40 C.F.R. § 19.4, Table 1.

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division